ISO NWIP
ISO/TC 37 ANNUAL FORUM BRUSSELS
11TH JUNE 2023

A STANDARD NOTATION FOR BUSINESS REPORTS

DR. JÜRGEN FAISST AND DIEGO BEREA
IBCS ASSOCIATION

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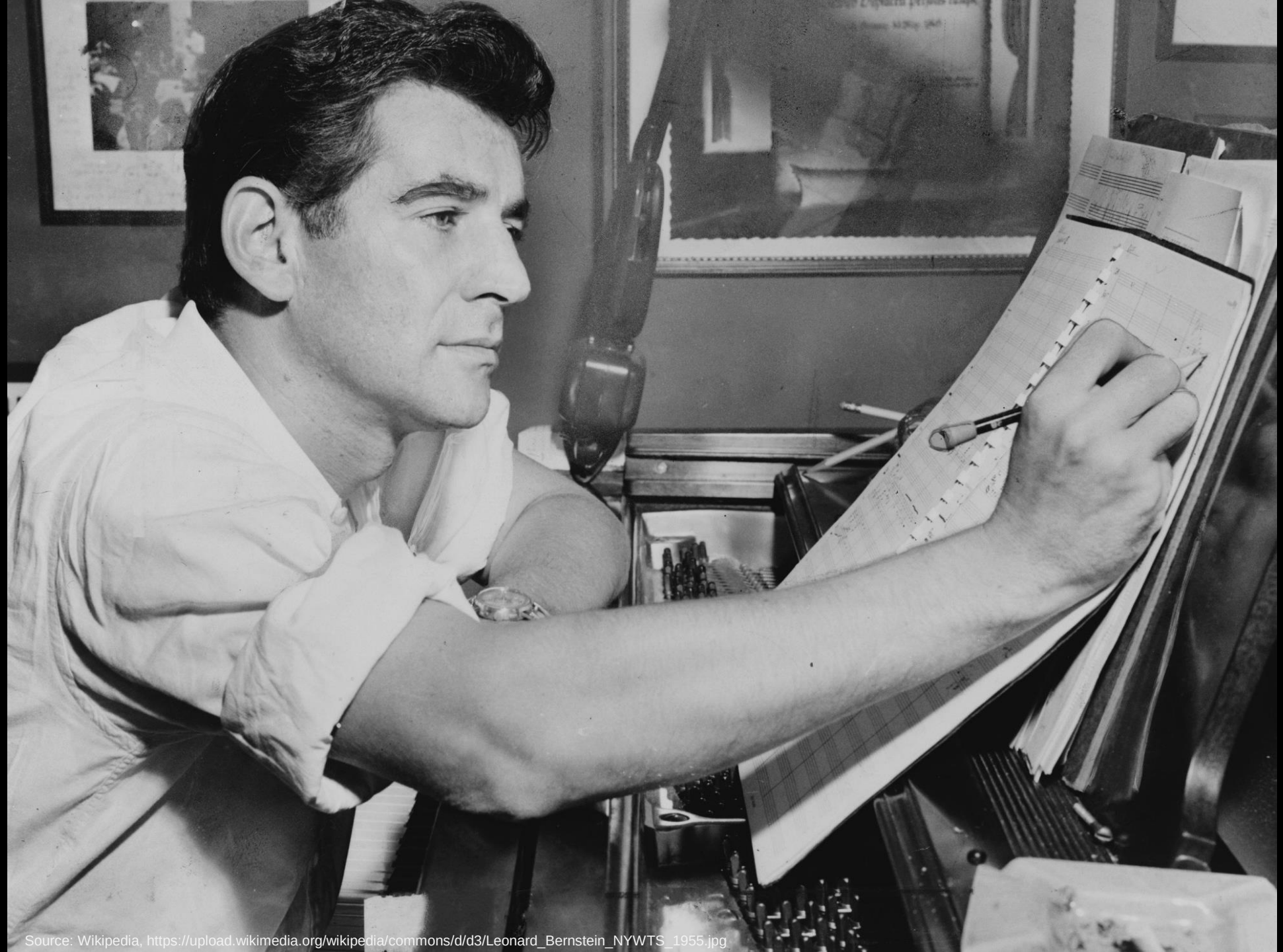
- Make curious about a new ISO NWIP on report notation
- Q/A



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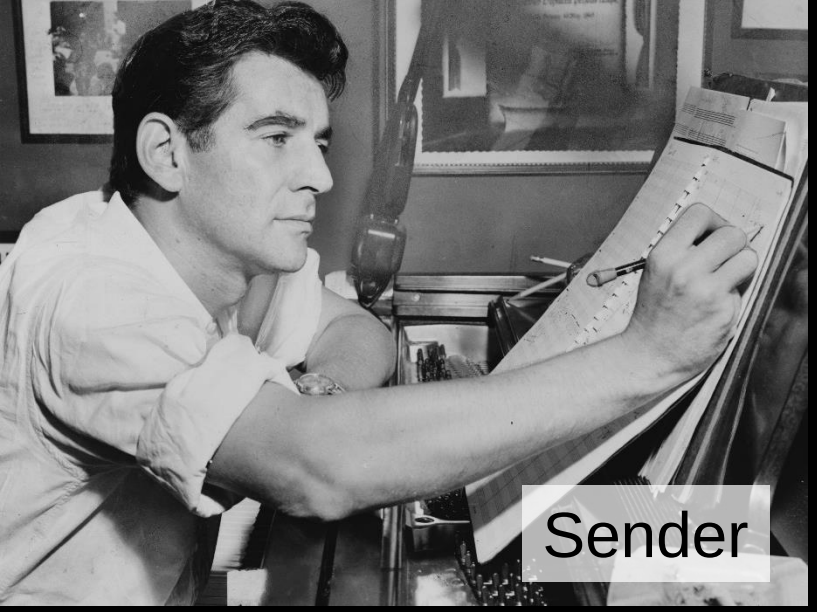
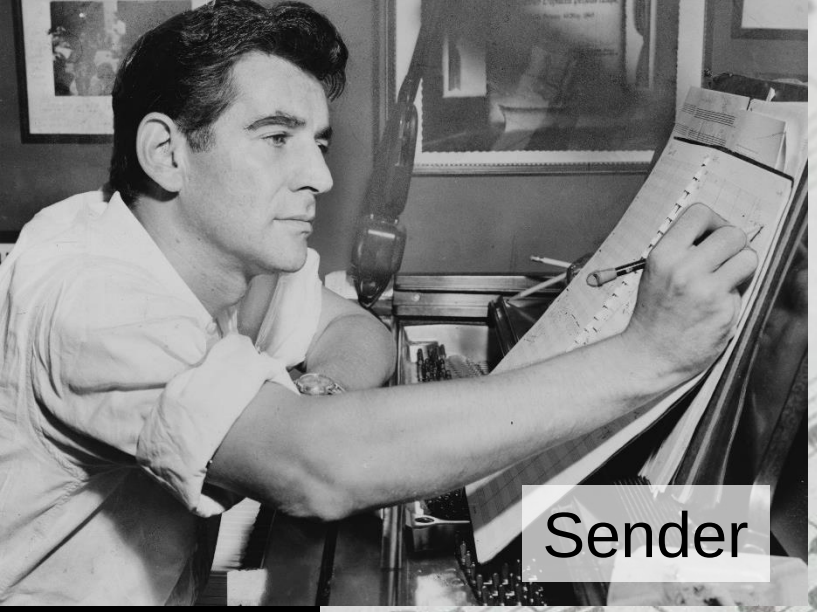

Sender

?


Receiver



Sender

Transfer medium

Receiver

Sender

Transfer medium

Receiver

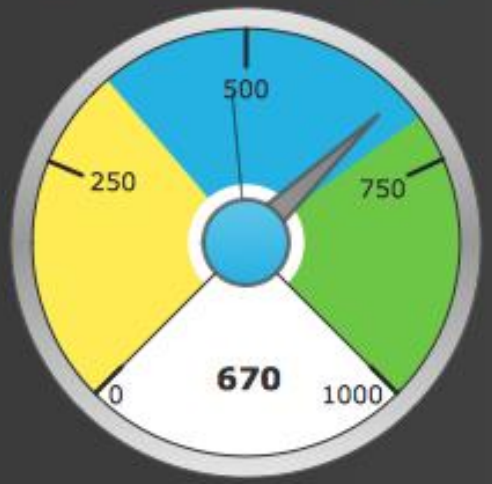

Sender

?


Receiver

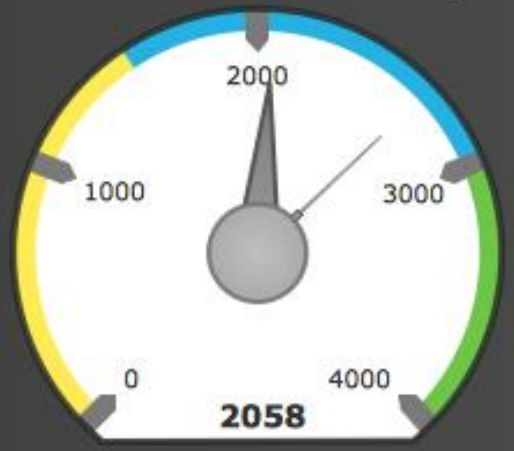
KPIs

Average Order Size in June
vs. Avg Order Size in May



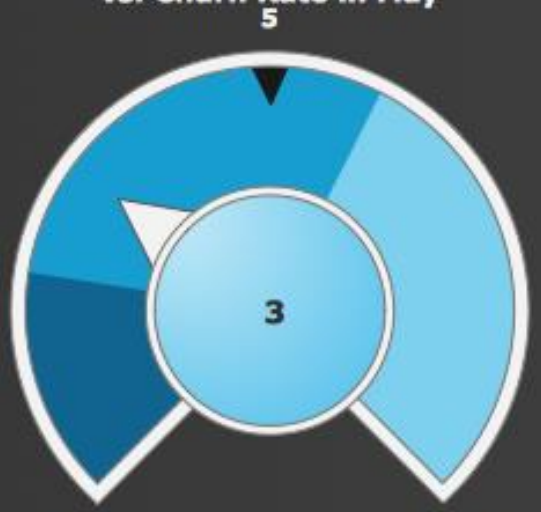
Pure
Normal
Excellent

New Customers in June
vs. New Customers in May



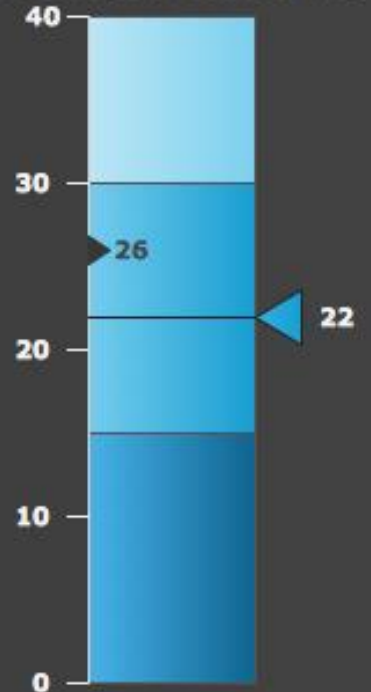
Pure
Normal
Excellent

Customer Churn Rate in June
vs. Churn Rate in May



Good
Normal
Bad

Cost per Lead in June
vs. Cost per Lead in May



Sales of Product A

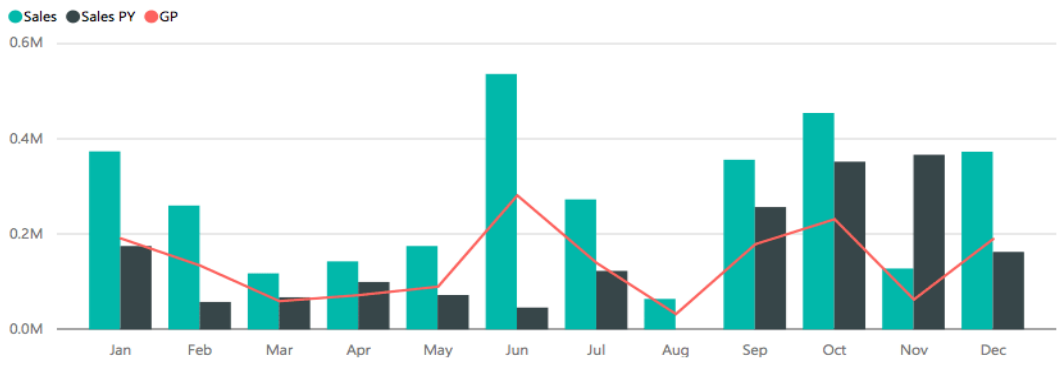
Sales of Product B

Cost per Sale in June
vs. Cost per Sale in May

Pure
Normal
Excellent

XERO SALES ANALYSIS

Sales
BY MNTH



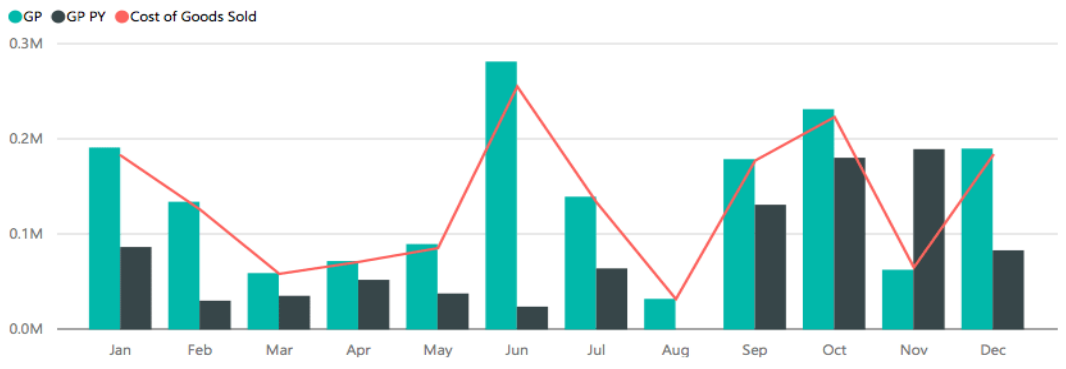
Sales Vs Prior Year

Sales
3,249,702 (+82.9 %)

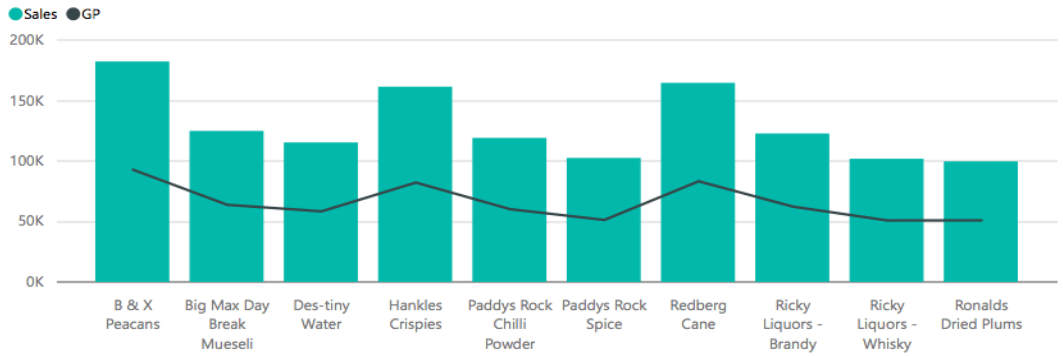
Gross Profit Vs Prior Year

GP
1,659,371 (+81.8 %)

Gross Profit
BY MONTH



Top 10 Products



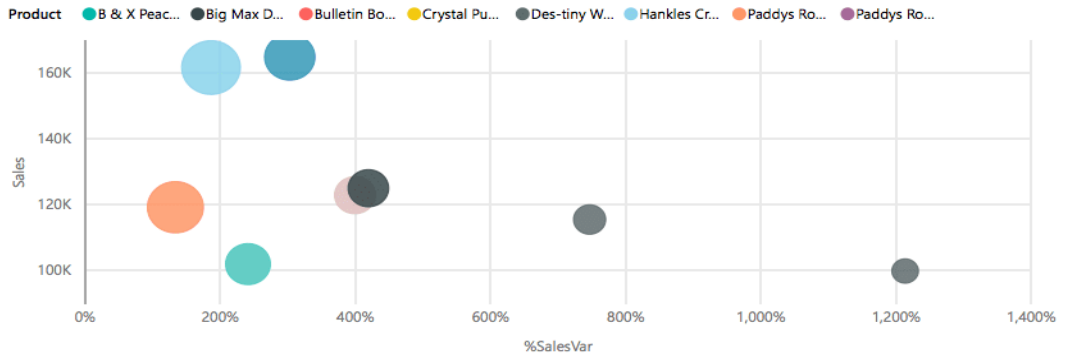
Cost of Goods Sold Vs Prior Year

Cost of Goods Sold
1,590,331 (+84.1 %)

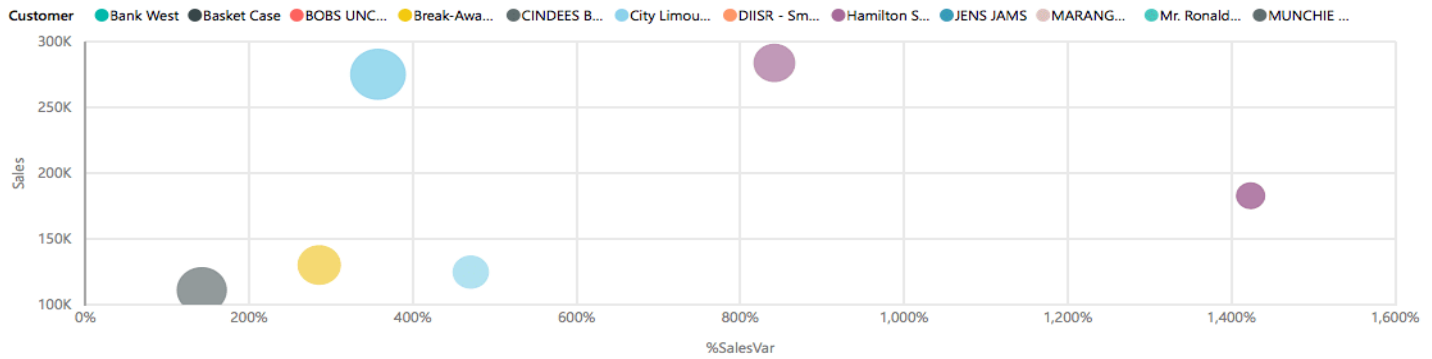
Quantity Vs Prior Year

QTY
1,777 (+61.8 %)

Top 10 Products Growth



Top 10 Customers Growth



Top 10 Customers

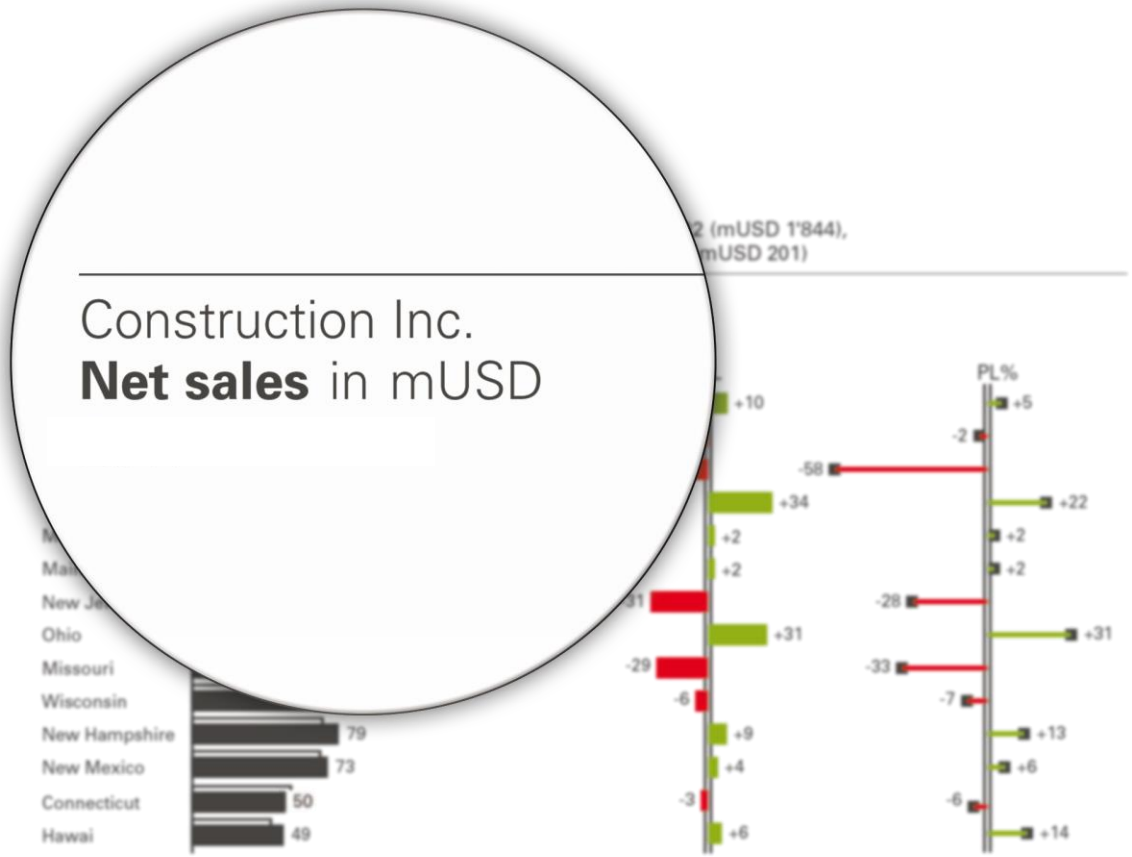

Sender


Receiver

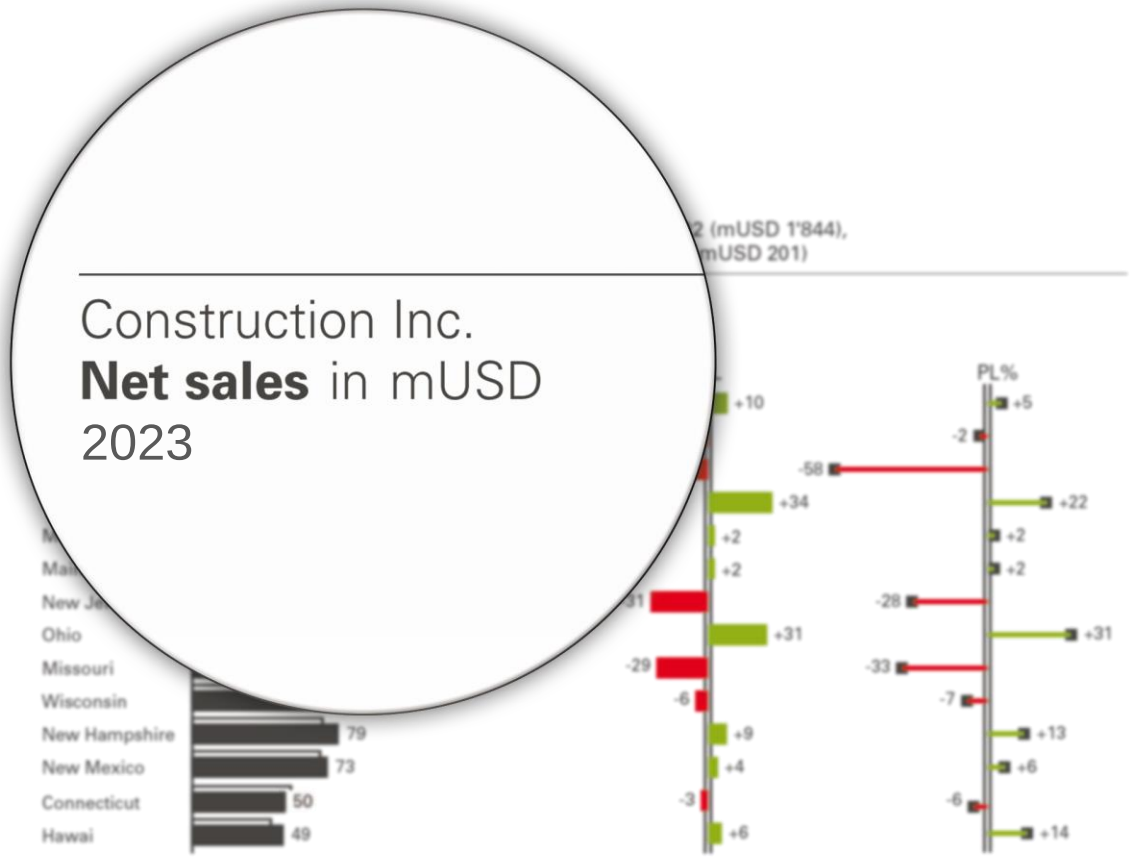

If we want to make business communication more effective, then **things that mean the same have to look the same**.
Prof. Rolf Hichert
IBCS Association

1 Let us unify the titles of pages, charts, and tables. We name the… organizational unit (who)

1 Let us unify the titles of pages, charts, and tables. We name the… organizational unit (who), measure (what)



1 Let us unify the titles of pages, charts, and tables. We name the… organizational unit (who), measure (what), and time period (when).



2 Let us identify scenarios by fill patterns.

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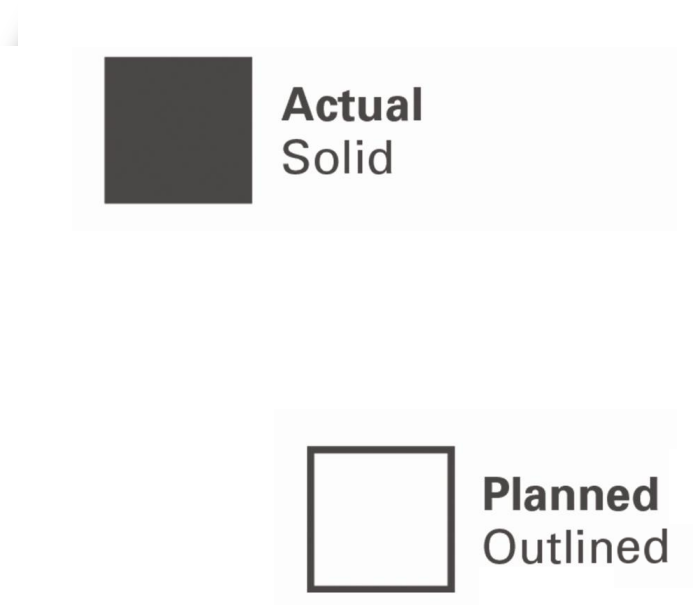

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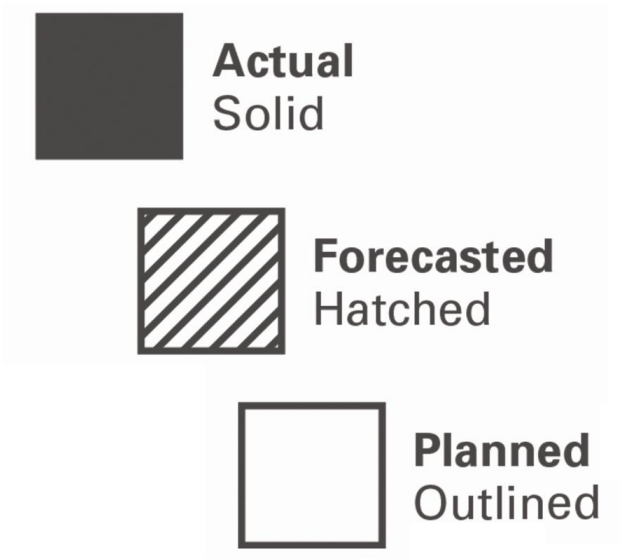

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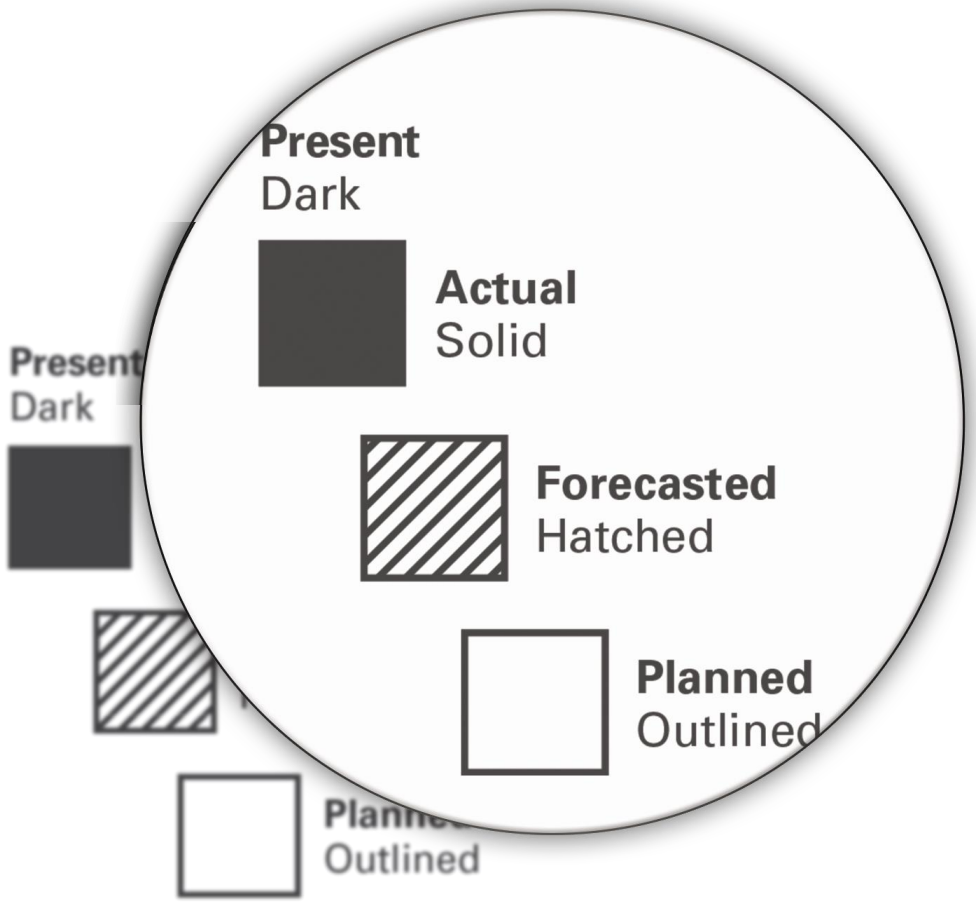
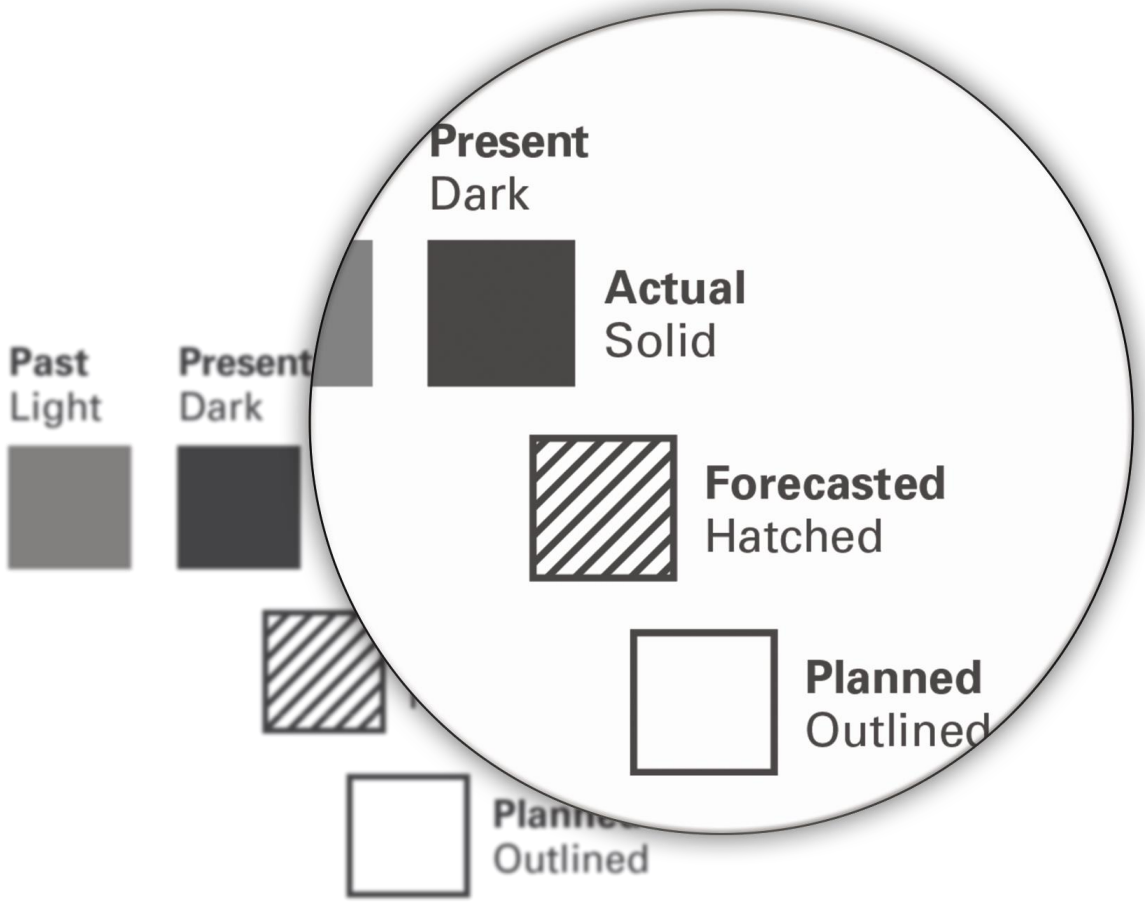
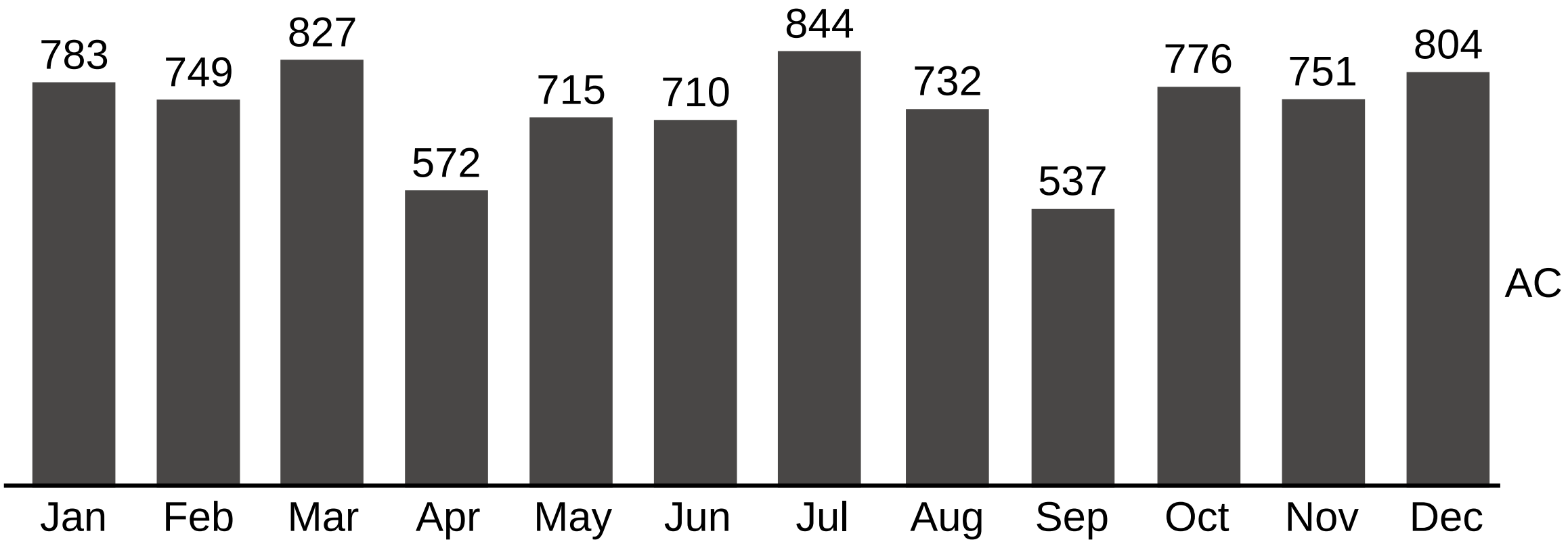


2 Let us identify scenarios by fill patterns.

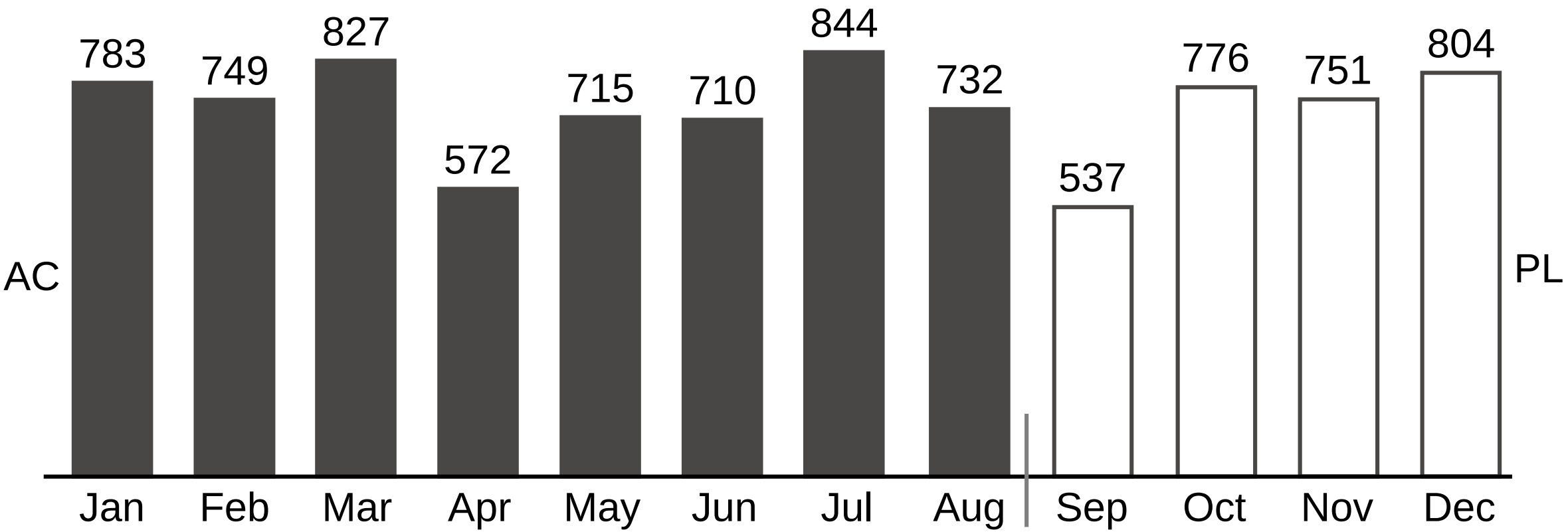


Construction Inc.
Net sales in mUSD
2023

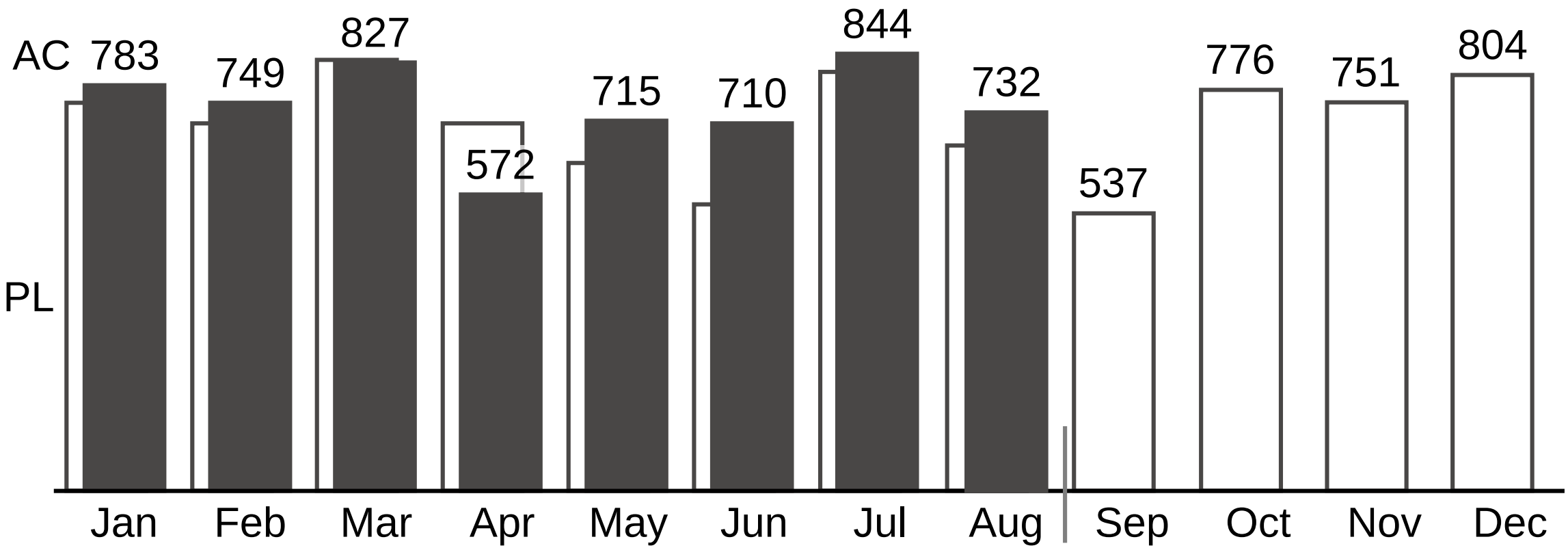
Construction Inc.
Net sales in mUSD
2023



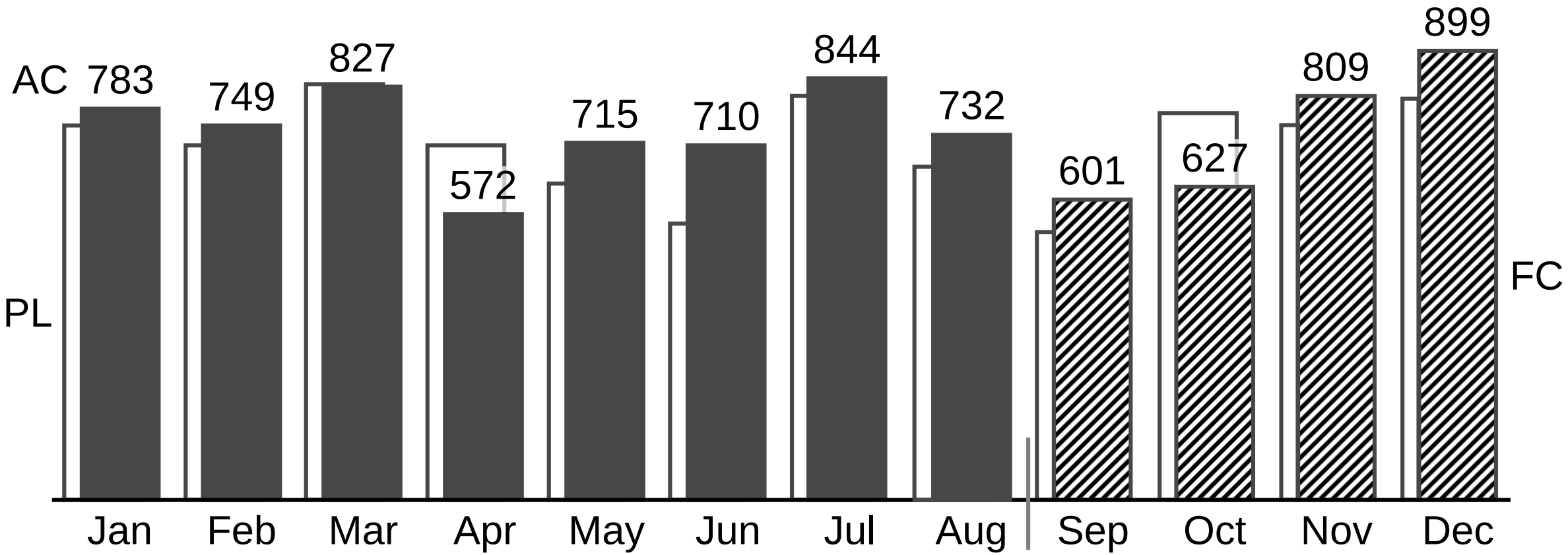
Construction Inc.
Net sales in mUSD
2023



Construction Inc.
Net sales in mUSD
2023



Construction Inc.
Net sales in mUSD
2023



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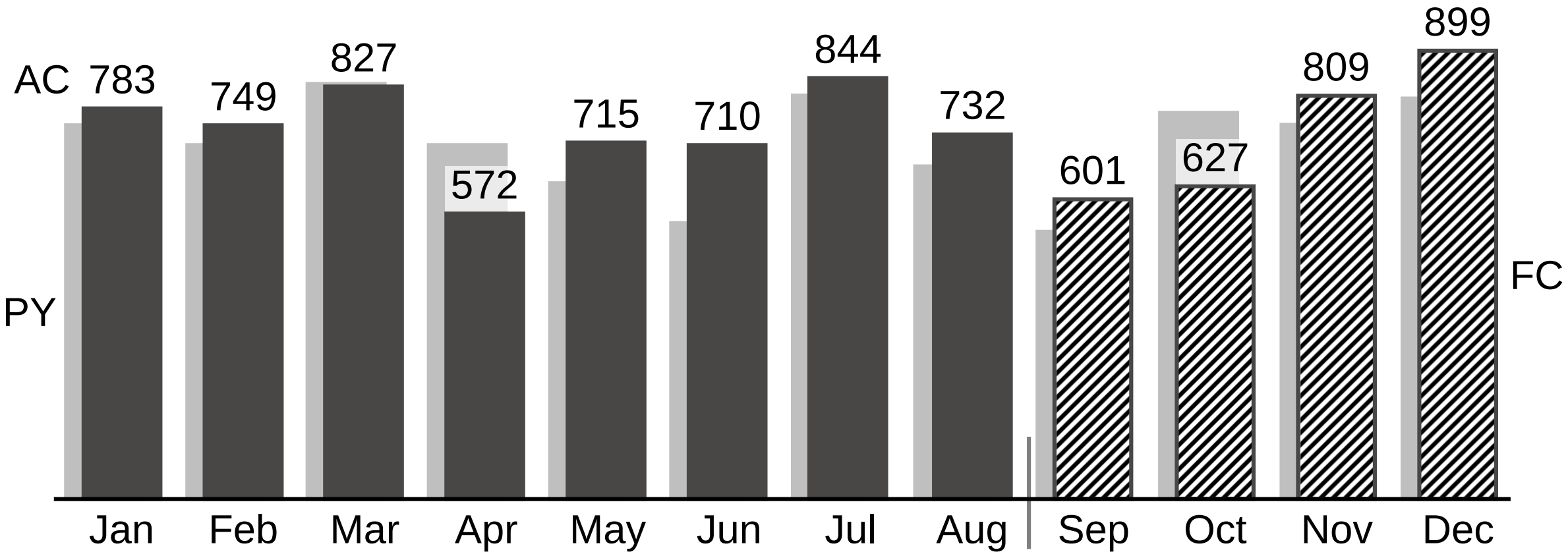
Construction Inc.
Net sales in mUSD
2023



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IBCS VERSION 1.2

IBCS Version 1.2 provides practical guidelines for the consistent design of reports, presentations, dashboards and the charts and tables they contain. The further development of IBCS is an ongoing process, which is managed by the not-for-profit IBCS Association.

UN 3.2 UNIFY SCENARIOS

In charts with stacked columns, sta
application of this semantic scenari
notation to the lowest segment and
Add a frame (outlined) or hatch pattern to these segments if they represent planned or forecasted data.

1

Comments Close

Jürgen *Feb 20 2022 at 10:36AM* Question

I love this new illustration of scenarios. What about other reference scenarios like benchmarks and competitors?

reply 0 0

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FREQUENTLY ASKED QUESTIONS

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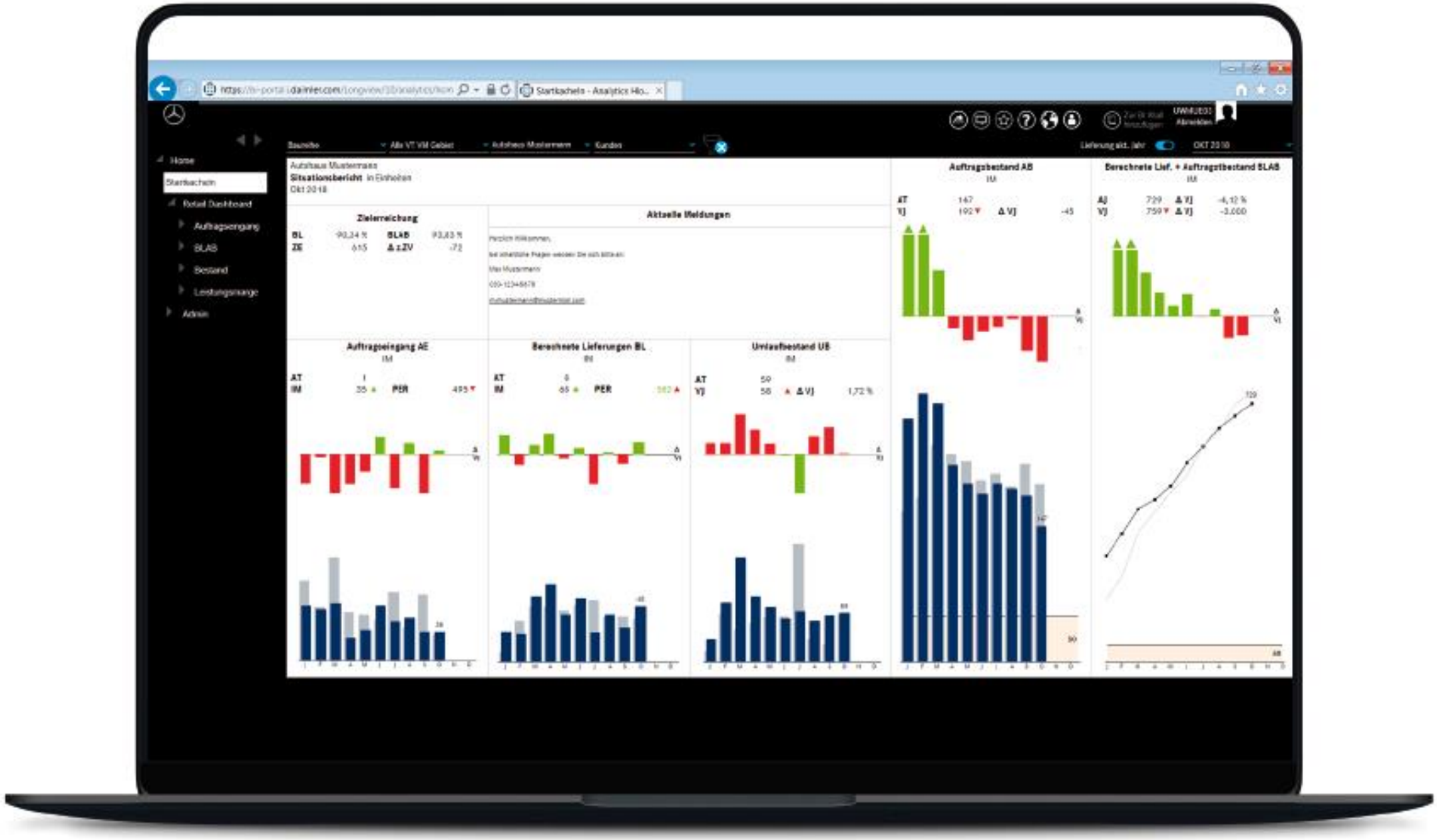

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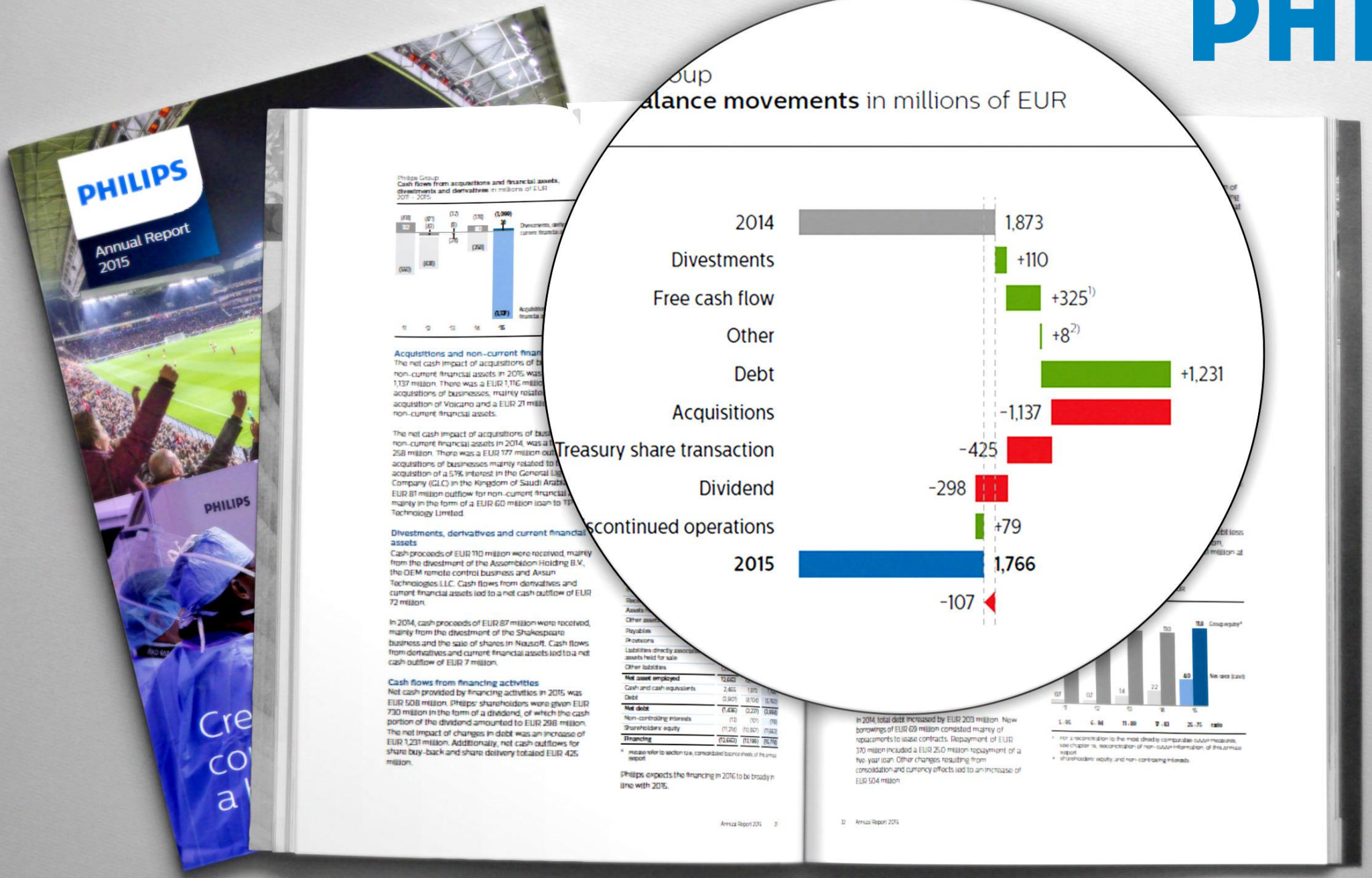

oup
alance movements in millions of EUR

Acquisitions and non-current finan
The net cash impact of acquisitions of b
non-current financial assets in 2015 was
1,137 million. There was a EUR 1,116 millio
acquisitions of businesses, mainly relate
acquisition of Volcano and a EUR 21 mill
non-current financial assets.

The net cash impact of acquisitions of busi
non-current financial assets in 2014, was a
258 million. There was a EUR 177 million ou
acquisitions of businesses mainly related to
acquisition of a 51% interest in the General Li
Company (GLC) in the Kingdom of Saudi Arabi
EUR 81 million outflow for non-current financial
mainly in the form of a EUR 60 million loan to TP
Technology Limited.

Divestments, derivatives and current financial assets
Cash proceeds of EUR 110 million were received, mainly from the divestment of the Assembléon Holding B.V., the OEM remote control business and Axsun Technologies LLC. Cash flows from derivatives and current financial assets led to a net cash outflow of EUR 72 million.

In 2014, cash proceeds of EUR 87 million were received, mainly from the divestment of the Shakespeare business and the sale of shares in Nausoft. Cash flows from derivatives and current financial assets led to a net cash outflow of EUR 7 million.

Cash flows from financing activities
Net cash provided by financing activities in 2015 was EUR 508 million. Philips' shareholders were given EUR 730 million in the form of a dividend, of which the cash portion of the dividend amounted to EUR 298 million. The net impact of changes in debt was an increase of EUR 1,231 million. Additionally, net cash outflows for share buy-back and share delivery totaled EUR 425 million.

Philips expects the financing in 2016 to be broadly in line with 2015.

In 2014, total debt increased by EUR 203 million. New borrowings of EUR 69 million consisted mainly of replacements to lease contracts. Repayment of EUR 370 million included a EUR 250 million repayment of a five-year loan. Other changes resulting from consolidation and currency effects led to an increase of EUR 504 million.

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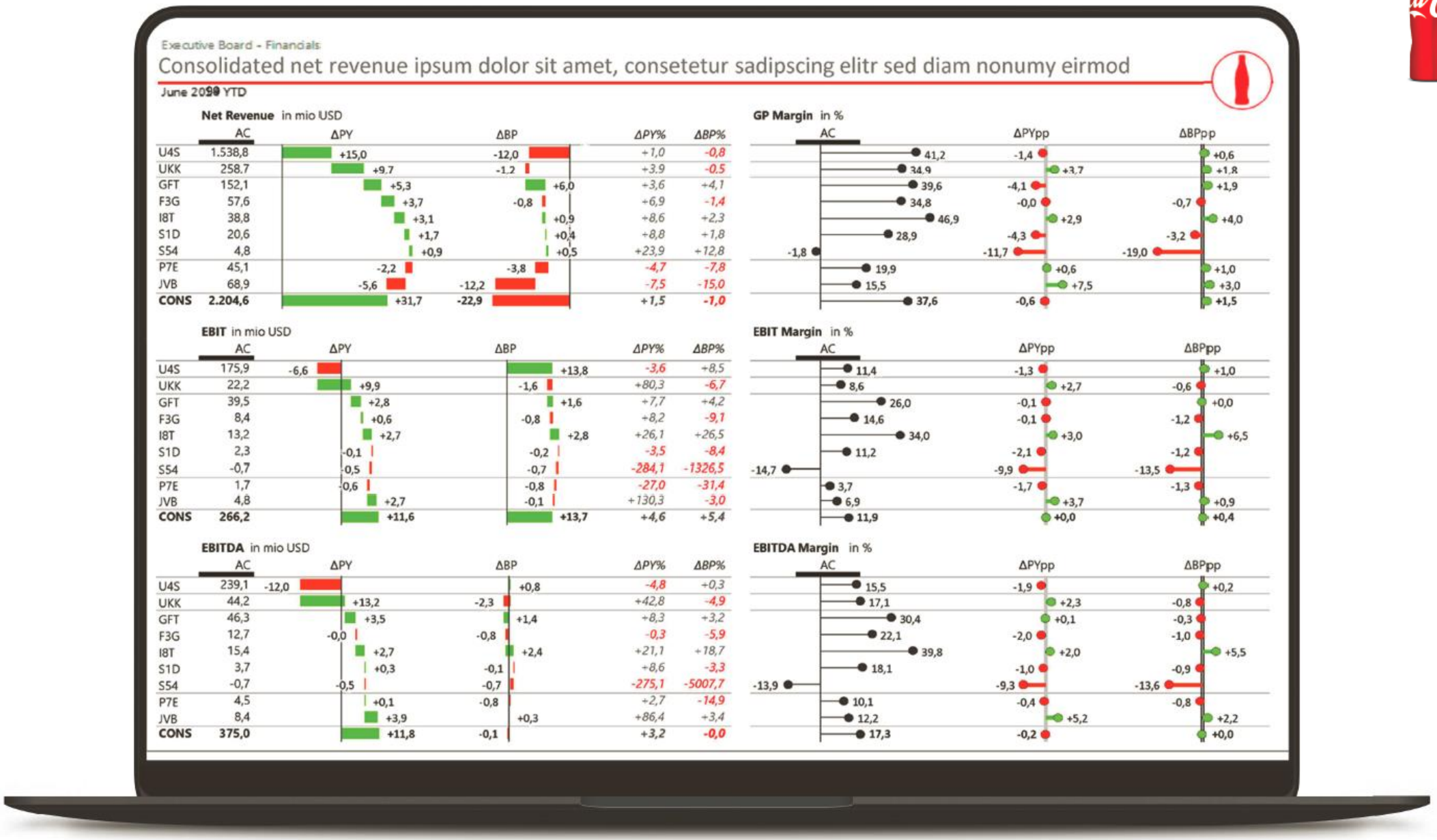
Executive Board - Financials
Consolidated net revenue ipsum dolor sit amet, consetetur sadipscing elitr sed diam nonumy eirmod
June 2099 YTD
Net Revenue in mio USD
AC ΔPY ΔBP ΔPY% ΔBP%
U4S 1.538,8 +15,0 -12,0 +1,0 -0,8
UKK 258.7 +9.7 -1.2 +3.9 -0.5
GFT 152,1 +5,3 +6,0 +3,6 +4,1
F3G 57,6 +3,7 -0,8 +6,9 -1,4
I8T 38,8 +3,1 +0,9 +8,6 +2,3
S1D 20,6 +1,7 +0,4 +8,8 +1,8
S54 4,8 +0,9 +0,5 +23,9 +12,8
P7E 45,1 -2,2 -3,8 -4,7 -7,8
JVB 68,9 -5,6 -12,2 -7,5 -15,0
CONS 2.204,6 +31,7 -22,9 +1,5 -1,0
GP Margin in %
AC ΔPYpp ΔBPpp
41,2 -1,4 +0,6
34.9 +3.7 +1.8
39,6 -4,1 +1,9
34,8 -0,0 -0,7
46,9 +2,9 +4,0
28,9 -4,3 -3,2
-1,8 -11,7 -19,0
19,9 +0,6 +1,0
15,5 +7,5 +3,0
37,6 -0,6 +1,5
EBIT in mio USD
AC ΔPY ΔBP ΔPY% ΔBP%
U4S 175,9 -6,6 +13,8 -3,6 +8,5
UKK 22,2 +9,9 -1,6 +80,3 -6,7
GFT 39,5 +2,8 +1,6 +7,7 +4,2
F3G 8,4 +0,6 -0,8 +8,2 -9,1
I8T 13,2 +2,7 +2,8 +26,1 +26,5
S1D 2,3 -0,1 -0,2 -3,5 -8,4
S54 -0,7 -0,5 -0,7 -284,1 -1326,5
P7E 1,7 -0,6 -0,8 -27,0 -31,4
JVB 4,8 +2,7 -0,1 +130,3 -3,0
CONS 266,2 +11,6 +13,7 +4,6 +5,4
EBIT Margin in %
AC ΔPYpp ΔBPpp
11,4 -1,3 +1,0
8,6 +2,7 -0,6
26,0 -0,1 +0,0
14,6 -0,1 -1,2
34,0 +3,0 +6,5
11,2 -2,1 -1,2
-14,7 -9,9 -13,5
3,7 -1,7 -1,3
6,9 +3,7 +0,9
11,9 +0,0 +0,4
EBITDA in mio USD
AC ΔPY ΔBP ΔPY% ΔBP%
U4S 239,1 -12,0 +0,8 -4,8 +0,3
UKK 44,2 +13,2 -2,3 +42,8 -4,9
GFT 46,3 +3,5 +1,4 +8,3 +3,2
F3G 12,7 -0,0 -0,8 -0,3 -5,9
I8T 15,4 +2,7 +2,4 +21,1 +18,7
S1D 3,7 +0,3 -0,1 +8,6 -3,3
S54 -0,7 -0,5 -0,7 -275,1 -5007,7
P7E 4,5 +0,1 -0,8 +2,7 -14,9
JVB 8,4 +3,9 +0,3 +86,4 +3,4
CONS 375,0 +11,8 -0,1 +3,2 -0,0
EBITDA Margin in %
AC ΔPYpp ΔBPpp
15,5 -1,9 +0,2
17,1 +2,3 -0,8
30,4 +0,1 -0,3
22,1 -2,0 -1,0
39,8 +2,0 +5,5
18,1 -1,0 -0,9
-13,9 -9,3 -13,6
10,1 -0,4 -0,8
12,2 +5,2 +2,2
17,3 -0,2 +0,0

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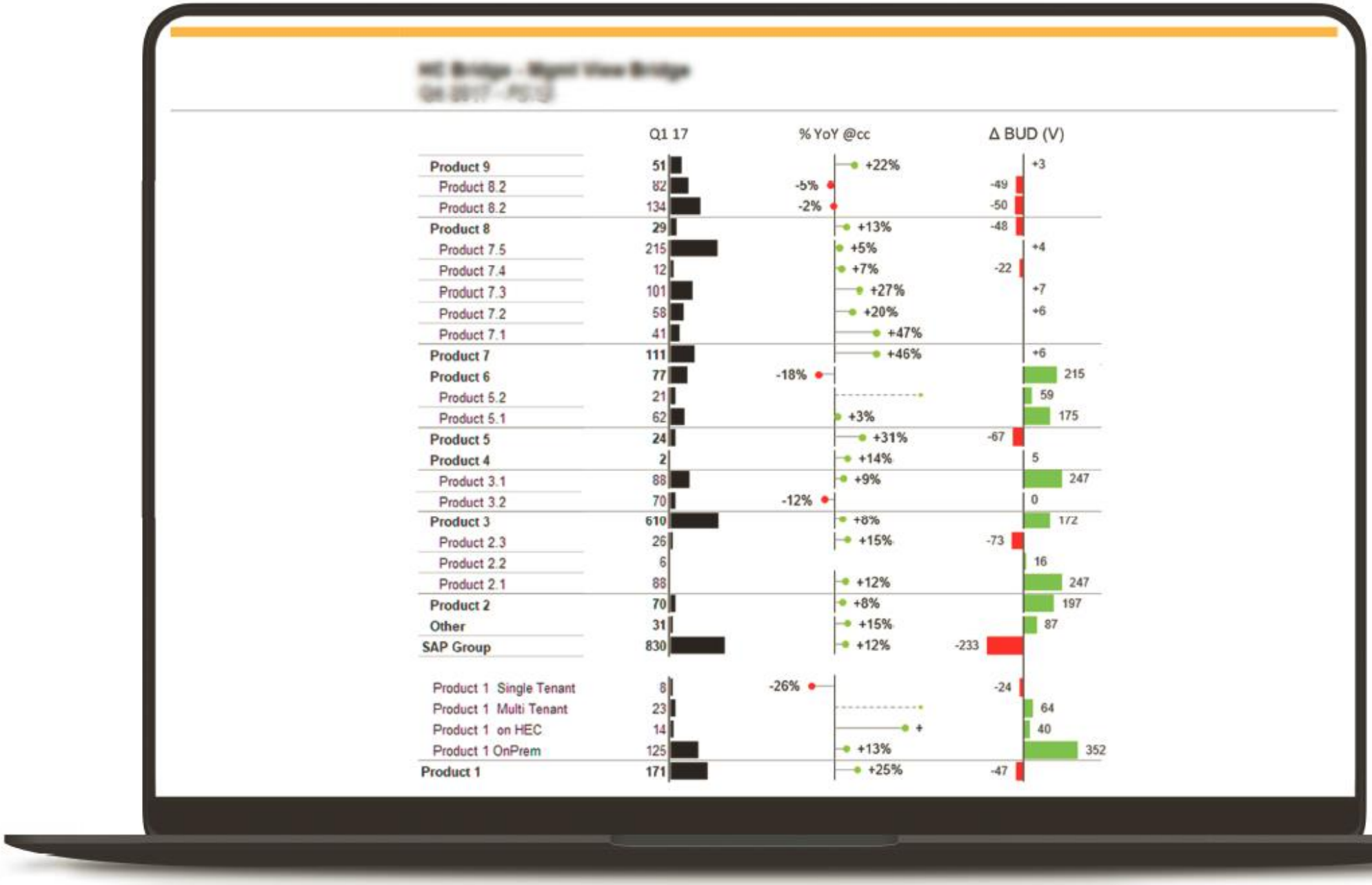
Q1 17
% YoY @cc
Δ BUD (V)
Product 9 51 +22% +3
Product 8.2 82 -5% -49
Product 8.2 134 -2% -50
Product 8 29 +13% -48
Product 7.5 215 +5% +4
Product 7.4 12 +7% -22
Product 7.3 101 +27% +7
Product 7.2 58 +20% +6
Product 7.1 41 +47%
Product 7 111 +46% +6
Product 6 77 -18% 215
Product 5.2 21 59
Product 5.1 62 +3% 175
Product 5 24 +31% -67
Product 4 2 +14% 5
Product 3.1 88 +9% 247
Product 3.2 70 -12% 0
Product 3 610 +8% 172
Product 2.3 26 +15% -73
Product 2.2 6 16
Product 2.1 88 +12% 247
Product 2 70 +8% 197
Other 31 +15% 87
SAP Group 830 +12% -233
Product 1 Single Tenant 8 -26% -24
Product 1 Multi Tenant 23 64
Product 1 on HEC 14 + 40
Product 1 OnPrem 125 +13% 352
Product 1 171 +25% -47

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graphomate charts, matrix & bubbles

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Lumel Technologies
Inforiver Charts & Matrix 1.0

Longview
Longview Analytics

SAP
SAP Analytics Cloud

HighCoordination
TRUECHART

Vitara
VitaraCharts

XLCubed
XLCubed

Zebra BI
Zebra BI for Excel

Zebra BI
Zebra BI Visuals for Power BI

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4.3.2 Ratios

Ratios such as "return on sales" are quotients of two base measures and thus become derived measures. In reporting practice, few denominators exist: "Sales", "units sold", "headcount", and "capital" constitute the majority of all business ratios.

In order to recognise a ratio in a column or bar chart, the width of both bars and columns shall be set to half the width of bars and columns representing *base measures* i.e. 1/3 of the category width.

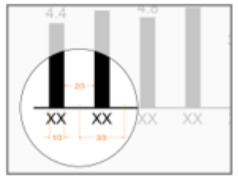

Figure 20: Columns showing a ratio

4.4 Notation of scenario types

When analysing data by looking at charts and tables, it is very important to quickly recognize whether it shows measured, expected, or fictitious data. Readers of reports shall visually recognize these scenario types by looking at a chart or a table without having to read the labels.

4.4.1 Scenario types

There are two basic types of scenarios:

1. *Actual* scenarios refer to *measured* data about things that already happened in present or past time periods. The terms most often used for scenarios of this type are 'Actual' and 'Previous year' (meaning actual data from previous year).

2. *Planned* scenarios refer to *fictitious* (not materialized) data. The terms most often used for scenarios of this type are 'Plan' and 'Budget'.

In-between those two basic scenario types there is a third one:

3. *Forecasted* scenarios refer to *expected* data which are strictly speaking fictitious but already taking into account measured data. A typical example for expected data is the sales forecast based on the measured order entry. Forecasted scenarios represent a higher level of certainty than scenarios with planned data but are not completely materialized yet. The term most often used for scenarios of this type is 'Forecast'.

4.4.1.1 Notation of actual scenarios (measured data)

Scenarios with measured data shall be identified by a solid dark (e.g. dark grey) fill for the areas of the respective visualization elements.

If measured data of recent periods ("Actual") are compared with measured data from earlier periods (e.g. "Previous year", "Previous month") in a scenario comparison, then the areas representing the earlier periods shall be presented with a lighter solid fill (e.g. light grey).

NOTE: If data from multiple periods is presented in a time series rather than a scenario comparison, then there is no need for colouring earlier periods with a lighter fill.

4.4.1.2 Notation of planned scenarios (fictitious data)

Scenarios with fictitious data shall be identified by outlined (bordered, framed) areas of the respective visualization elements. The areas within these borders literally "fill up when materializing", e.g. when changing from fictitious data to measured data.

4.4.1.3 Notation of forecasted scenarios (expected data)

Expected data is strictly speaking fictitious, so they shall also be identified by outlined areas. However, as it is based on measured data, the area fill of the respective visualization elements shall be filled with a hatched pattern. The colour of the dark stripes shall correspond to the colour of measured data (e.g. dark grey).

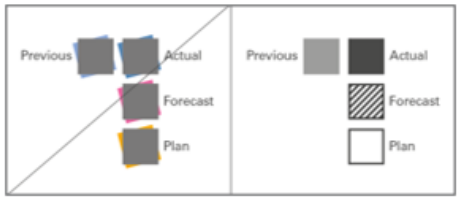

Figure 21: Notation of scenario types

4.4.2 Application of scenario notation in charts and tables

In charts, the semantic scenario notation shall be applied to the *area fill* of the visualization element representing the scenario. Typical visualization elements to carry semantic scenario notation in charts are bars, columns and line markers.

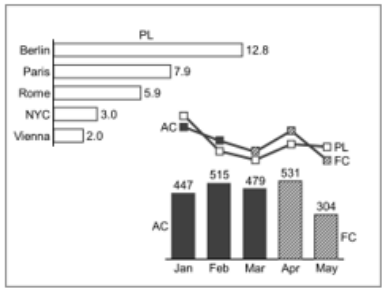

Figure 22: Visualization of scenario types in bars, columns, and line markers

In charts with stacked columns, stacked areas, and stacked bars, the scenario notation shall be applied to the lowest segment. All upper segments shall be filled with different shades of grey with an additional frame (outlined) or hatch pattern if these segments represent planned or forecasted data.

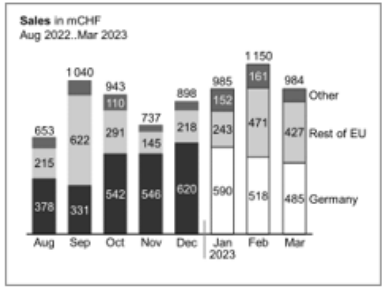

Figure 23: Visualization of scenario types in stacked columns

Join our session
Tuesday June 6
17:00
ASP 1E2

A STANDARD NOTATION FOR BUSINESS REPORTS

Agenda

- Why an ISO NWIP for report notation based on IBCS?
- What is IBCS?
- Examples from NWIP Pre-Expert Draft
  https://sd.iso.org/documents/open/8a8f2d93-32be-4b01-ac02-af3d3c30a786
- Q/A
- Is this initiative of interest to ISO/TC37?

Resources for further information on benefits of a standardised report notation

Videos

- Explanatory video:

  https://youtu.be/VkCyNOioUQQ

- Introductory lesson to video course “Solid, outlined, hatched”:

  https://ibcs.teachable.com/courses/solid-outlined-hatched/lectures/15948252

Books

- IBCS Version 1.2:

  https://geni.us/standards_ibcs (also available in Spanish language)

- Solid, outlined, hatched – How visual consistency helps better understand reports, presentations and dashboards:

  https://geni.us/soh_ibcs (also available in German language)